

Thursday, March 27 8:00 AM–5:00 PM

SC-4: Let's Get Physical...About Oceanography, That Is!

Offsite, Stellwagen Bank National Marine Sanctuary

Ticketed Event: \$57 advance; \$64 on-site

Are you always looking for new, hands-on, inquiry-based activities to help explain the basic concepts of physical oceanography? Well, come spend the day at Stellwagen Bank National Marine Sanctuary and explore a series of activities and resources to help you and your students understand physical oceanography concepts.

Presenter(s): Ann Kelly (Bishop DuBourg High School, St. Louis, Mo.); Barbara Walton-Faria (Thompson Middle School, Middletown, R.I.); Kathleen A. Murphy (Ladue Middle School, St. Louis, Mo.); Anne Smrcina (Stellwagen Bank National Marine Sanctuary, Scituate, Mass.); Peg Steffen (NOAA Ocean Service, Silver Spring, Md.)

FORMAT: Short course

SUBJECT: General Science

GRADE LEVEL: General

CONFERENCE STRAND: Sharpening the Edge in Science

Thursday, March 27 8:30 AM–4:30 PM

T-6: Marine Science in Woods Hole

Ticketed Event: \$26 advance; \$33 on-site.

Woods Hole, Massachusetts, is world renowned as a center of marine science.

FORMAT: Field trip

Thursday, March 27 9:00–10:00 AM

Ocean Literacy Through Science Standards

Seaport World Trade Center, Harborview II

Come to this session to hear a panel discuss how the ocean literacy essential principles and fundamental concepts are influencing textbook development, state standards, textbook adoptions, and educational programs for formal K–12 audiences.

Presenter(s): Sarah E. Schoedinger (NOAA: Washington, DC)

FORMAT: Presentation

SUBJECT: Environmental Science

GRADE LEVEL: Supervision/Administration

Thursday, March 27 9:30–10:30 AM

The NOAA Ocean Data Education Portal: Integrated Data to Support Increased Environmental Literacy

Boston Convention & Exhibition Center, Room 205B

Learn about a new NOAA Ocean Data Education Portal. Join us for a demonstration of its use in one of several currently available educational modules.

Presenter(s): Caroline Joyce (University of Wisconsin: Milwaukee, WI); Todd Viola (Port Aransas, TX); Michiko Martin (NOAA National Marine Sanctuaries: Silver Spring, MD); Kenneth S. Casey (NOAA: Silver Spring, MD); Atziri O. Ibanez (National Estuarine Research Reserve System: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

CONFERENCE STRAND: Using and Abusing Data

Thursday, March 27 9:30 AM–5:30 PM

T-8: Marine Science in Woods Hole

Ticketed Event: \$26 advance; \$33 on-site

Woods Hole, Massachusetts, is world renowned as a center of marine science.

FORMAT: Field trip

Thursday, March 27 11:00 AM–12:00 PM

NOAA Coral Reef Watch: Teaching About Coral Reefs Using Satellite Data

Seaport World Trade Center, Harborview II

This session will present NOAA's system for predicting coral bleaching from space.

Resources include lesson plans, an online tutorial, and a hands-on activity for the NSTA audience.

Presenter(s): Tyler Christensen (NOAA: Silver Spring, MD); Jessica A. Morgan (National Oceanic and Atmospheric Administration: Silver Spring, MD)

FORMAT: Workshop

SUBJECT: Environmental Science

GRADE LEVEL: Informal Education

Thursday, March 27 12:30–1:30 PM

OceansLIVE in the Classroom!

The Westin Boston Waterfront, Grand Ballroom C

Join NOAA's National Marine Sanctuary Program to learn more about how you can bring underwater treasures live in your classroom! Come learn how to take your classroom to the ocean without even getting wet!

Presenter(s): Kate Thompson (NOAA National Marine Sanctuaries: Silver Spring, MD); Michiko Martin (NOAA National Marine Sanctuaries: Silver Spring, MD); Claire Johnson Fackler (NOAA National Marine Sanctuaries: Santa Barbara, CA)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: Informal Education

Thursday, March 27 1:30–6:00 PM

SYM-1: NOAA/NSTA Symposium: Coral Ecosystems

Boston Convention & Exhibition Center, Room 256

Ticketed Event: \$47 advance; \$54 on-site

NSTA is partnering with NOAA to present an exciting symposium for middle school and high school–level educators on the topic of coral ecosystems. This event is a blended professional development opportunity that includes this face-to-face learning opportunity at the conference followed by several online experiences—a discussion listserv and two NSTA Web Seminars—to extend the interactivity between the participants and NOAA. Attendance to the symposium requires conference registration.

Presenter(s): Liza Johnson (NOAA Coral Reef Conservation Program, Silver Spring, Md.); NOAA Team of Presenters

FORMAT: NSTA symposium
SUBJECT: Earth Science
GRADE LEVEL: Grades 5–12

Thursday, March 27 4:30–5:30 PM

Underwater Robotic Exploration Vehicles

Seaport World Trade Center, Harborview II

Participate in an engaging NOAA ocean exploration lesson plan activity to identify underwater robotic vehicles best suited for specific given exploration tasks. Take home materials!

Presenter(s): Paula Keener-Chavis (NOAA Office of Ocean Exploration: Charleston, SC)

FORMAT: Workshop
SUBJECT: General Science
GRADE LEVEL: Middle Level-High School/Informal Education

Friday, March 28 8:00–9:00 AM

Understanding Lightning and Lightning Safety

The Westin Boston Waterfront, Commonwealth C

Lightning is the second greatest storm-related killer in the U.S., yet it remains one of the least understood. Learn more about the science of lightning and lightning safety.

Presenter(s): John S. Jensenius, Jr. (NOAA National Weather Service: Gray, ME)

FORMAT: Presentation
SUBJECT: Earth Science

GRADE LEVEL: General

Friday, March 28 8:00–9:00 AM

NOAA Session: An Interdisciplinary Approach to Teaching Earth System Science and Environmental Education Using the Coral Reef Ecosystem

Boston Convention & Exhibition Center, Room 257B

This presentation will highlight new Earth system science principles and coral-related education resources for educators in celebration of the 2008 International Year of the Reef.

Presenter(s): Liza M. Johnson (NOAA: Silver Spring, MD); Paulo Maurin (NOAA: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

Friday, March 28 8:00 AM–6:00 PM

SC-12: Teaching About Oceans and Coasts: Research and Resources

Offsite, Woods Hole

Ticketed Event: \$65 advance; \$72 on-site

Come explore ocean and coastal research at renowned Woods Hole area laboratories. At Waquoit Bay National Estuarine Research Reserve, we'll learn about research on coastal systems and study coastal impacts of climate change using data from Research Reserves in the Northeast. At Woods Hole Oceanographic Institution, we'll hear about the latest climate research and tour the docks to see some amazing new ocean technology. At the National Marine Fisheries Service Science Center, we'll learn about research on fisheries and climate and take an insider's tour of the aquarium.

Presenter(s): Pat Harcourt and Joan Muller (Waquoit Bay National Estuarine Research Reserve, Waquoit, Mass.); George Liles (NEFSC, National Marine Fisheries Service, Woods Hole, Mass.); Kristin Van Wagner (Narragansett Bay National Estuarine Research Reserve, Prudence Island, R.I.); Katherine Madin (Woods Hole Oceanographic Institution, Woods Hole, Mass.)

FORMAT: Short course

SUBJECT: General Science

GRADE LEVEL: Middle Level–College

CONFERENCE STRAND: Cutting-Edge Research: Foundation for the Future

Friday, March 28 9:30–10:30 AM

NOAA Session: Predicting Coral Bleaching from Space: A Hands-On Data Activity

from NOAA Coral Reef Watch

Boston Convention & Exhibition Center, Room 257B

This presentation will highlight coral reef ecology, coral bleaching, and satellite observation systems. Presenters also will demonstrate hands-on activities for teachers and students using satellite data.

Presenter(s): Tyler Christensen (NOAA: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: Environmental Science

GRADE LEVEL: General

Friday, March 28 9:30–10:30 AM

NOAA Ocean Service Education: Online Standards and Inquiry-based Professional Development Materials and Resources for Teaching Earth and Life Sciences In Your Classroom

The Westin Boston Waterfront, Commonwealth C

These free online inquiry-based tutorials, case studies, and exercises with real-time data stimulate students' interest in and enhance their understanding of earth and life sciences.

Presenter(s): Bruce Moravchik (NOAA's National Ocean Service: Silver Spring, MD); Peg Steffen (NOAA's National Ocean Service: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: Earth Science

GRADE LEVEL: General

Friday, March 28 11:00 AM–12:00 PM

A NOAA Teacher at Sea Experience: Summer in the Shumagin Islands, Alaska

Boston Convention & Exhibition Center, Room 213

Learn about NOAA's Teacher at Sea Program from a community college instructor who spent 19 days on a NOAA ship in the Shumagin Islands, Alaska.

Presenter(s): Jacquelyn E. Hams (Los Angeles Valley College: Valley Glen, CA)

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

Friday, March 28 11:00 AM–12:00 PM

The International Polar Year, Year 2

The Westin Boston Waterfront, Adams

IPY is an incredible opportunity to use a high-interest topic to interest students in cutting-edge science. Join NOAA's Einstein Fellows for an update and new classroom resources.

Presenter(s): Judy A. Reeves (Alabama Dept. of Education: Montgomery, AL); Christine Donovan (NOAA: Washington, DC)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 11:00 AM–12:00 PM

NOAA Session: Online Coral Ecosystem Resources from NOAA's Ocean Service and NSTA for Your Professional Development, and Teaching Earth and Life Sciences in Your Classroom

Boston Convention & Exhibition Center, Room 257B

Come find out about the free online professional development and teaching resources on coral reef ecosystems that NOAA's Ocean Service and NSTA have created for you.

Presenter(s): Bruce Moravchik (NOAA's National Ocean Service: Silver Spring, MD)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 11:00 AM–12:00 PM

Inspiring Ocean Literacy Through High-Tech Learning

The Westin Boston Waterfront, Douglas

Learn about new free electronic resources to bring oceans into classrooms through the ocean encyclopedia, marine sanctuary media library, and National Marine Sanctuary telepresence program.

Presenter(s): Michiko Martin (NOAA National Marine Sanctuaries: Silver Spring, MD); Kate Thompson (NOAA National Marine Sanctuaries: Silver Spring, MD); Claire Johnson Fackler (NOAA National Marine Sanctuaries: Santa Barbara, CA)

FORMAT: Presentation
SUBJECT: Environmental Science
GRADE LEVEL: General

Friday, March 28 12:30–1:30 PM

NOAA Session: Dive into America's Coral Reef Sanctuaries to Inspire Ocean Literacy I

Boston Convention & Exhibition Center, Room 257B

Learn about free electronic resources to bring oceans and coral reef ecosystems into the classroom through our marine life encyclopedia, media library, and OceansLive programs.

Presenter(s): Claire Johnson Fackler (NOAA National Marine Sanctuaries: Santa Barbara, CA); Andy Collins (NOAA National Marine Sanctuaries: Santa Barbara, CA)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 2:00–3:00 PM

NOAA Session: Dive into America's Coral Reef Sanctuaries to Inspire Ocean Literacy II

Boston Convention & Exhibition Center, Room 257B

Learn about the Flower Garden Banks in the Gulf of Mexico, and Papahānaumokuākea Marine National Monument, located off Hawaii, the largest marine conservation area in the world.

Presenter(s): Claire Johnson Fackler (NOAA National Marine Sanctuaries: Santa Barbara, CA); Andy Collins (NOAA National Marine Sanctuaries: Santa Barbara, CA)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 2:00–3:00 PM

Be an Ocean-going Scientist with NOAA!

The Westin Boston Waterfront, Adams

NOAA's Teacher-at-Sea Program affords teachers the opportunity to sail on NOAA vessels while working as scientific crew in oceanographic, surveying, or fisheries research. Learn how to participate.

Presenter(s): Judy A. Reeves (Alabama Dept. of Education: Montgomery, AL); Christine Donovan (NOAA: Washington, DC)

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 3:30–4:30 PM

Exploring the Monterey Bay National Marine Sanctuary: A Profile of the ISM ROV Explorers Team

Boston Convention & Exhibition Center, Room 253C

This session profiles an ongoing middle school/community initiative to explore the Monterey Bay Marine Sanctuary using student-designed underwater ROVs. Student engineers will be on hand to answer questions.

FORMAT: Presentation
SUBJECT: General Science
GRADE LEVEL: General

Friday, March 28 5:00–6:00 PM

Discover Corals with NOAA Resources

The Westin Boston Waterfront, Douglas

Coral is considered a barometer of the health of the planet. Bring the Year of the Reef (2008) to life for your students with NOAA resources!

Presenter(s): Judy A. Reeves (Alabama Dept. of Education: Montgomery, AL); Christine Donovan (NOAA: Washington, DC)

FORMAT: Presentation

SUBJECT: Environmental Science

GRADE LEVEL: General

Friday, March 28 5:00–6:00 PM

NOAA Session: Climate Science Literacy for the Nation and Teaching in Your Classroom

Boston Convention & Exhibition Center, Room 257B

Find out about the recently developed AAAS Project 2061's Weather and Climate Standards and NOAA's Climate Literacy professional development opportunities and educational resources.

Presenter(s): Frank Niepold (NOAA: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: Environmental Science

GRADE LEVEL: Elementary-High School

Friday, March 28 6:00–8:00 PM

Informal Science Day: Informal Science Education Share-a-Thon

Boston Convention & Exhibition Center, Ballroom West

Come to the lively informal science share-a-thon where informal science educators will showcase their programs and resources, and share ideas with the science education community.

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

Saturday, March 29 8:00 AM–12:30 PM

SYM-5: IPY/NSTA Symposium: Polar Science, Global Discoveries: IPY Research Update for Teachers

Boston Convention & Exhibition Center, Room 256

Ticketed Event: \$47 advance; \$54 on-site.

Join NSTA, NASA, NOAA, and NSF in celebrating the International Polar Year (IPY). IPY promises to advance our understanding of how Earth's remote polar regions impact global climate systems to bring about fundamental advances in many areas of science, and to fire the enthusiasm of students for future careers in science, technology, engineering, and mathematics. Attendance to the symposium requires conference registration.

Presenter(s): Sharon Locke (National Science Foundation, Arlington, Va.) and Team of Presenters from NSF, NASA, and NOAA

FORMAT: NSTA symposium
SUBJECT: Earth Science
GRADE LEVEL: Grades 5–12

Saturday, March 29 9:30–10:30 AM

Managing and Using Data in a Year-long Study of the Sun with Multiple Schools *Boston Convention & Exhibition Center, Room 161*

Investigate misconceptions about the Sun using available NASA and NOAA data, Sun angle measurements from students around the world, and measurements from the backyard.

Presenter(s): Charles F. Lindgren (Gates Intermediate School: Scituate, MA)

FORMAT: Presentation
SUBJECT: Earth Science
GRADE LEVEL: Middle Level

Saturday, March 29 9:30–10:30 AM

The NOAA Ocean Data Education Portal: Integrated Data to Support Increased Environmental Literacy *The Westin Boston Waterfront, Faneuil*

Learn about a new NOAA Ocean Data Education Portal! Join us for a demonstration of its use in one of several currently available educational modules.

Presenter(s): Todd Viola (Port Aransas, TX); Michiko Martin (NOAA National Marine Sanctuaries: Silver Spring, MD); Atziri O. Ibanez (National Estuarine Research Reserve System: Silver Spring, MD); Caroline Joyce (University of Wisconsin: Milwaukee, WI); Kenneth S. Casey (NOAA: Silver Spring, MD)

FORMAT: Presentation
SUBJECT: Environmental Science
GRADE LEVEL: Informal Education

Saturday, March 29 11:00 AM–12:00 PM

Einstein Fellows Go to Washington—Be One!

Seaport Hotel, Lighthouse 2

You've heard about Einstein Fellows—come hear what it's like to be one! This incredible opportunity for teachers is a "must-hear" if you like challenges.

Presenter(s): Judy A. Reeves (Alabama Dept. of Education: Montgomery, AL); Christine Donovan (NOAA: Washington, DC)

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

Saturday, March 29 3:30–4:30 PM

Investigating Estuaries with Online Monitoring Data: Activities from Estuaries 101

Boston Convention & Exhibition Center, Room 260 Analyze estuary data in this hands-on session showcasing data analysis activities from Estuaries 101, a new high school curriculum for earth, life, and physical science.

Presenter(s): Pat Harcourt (Waquoit Bay National Estuarine Research Reserve: Waquoit, MA); Brian J. Conroy (TERC: Cambridge, MA); Deborah Munson (TERC: Cambridge, MA); Atziri O. Ibanez (National Estuarine Research Reserve System: Silver Spring, MD)

FORMAT: Workshop

SUBJECT: Environmental Science

GRADE LEVEL: High School

CONFERENCE STRAND: Using and Abusing Data

Saturday, March 29 5:00–6:00 PM

Teaching with Marine Data

Boston Convention & Exhibition Center, Room 260

Try out activities and learn how to use online ocean and coastal data to motivate students and teach analytical and problem-solving skills.

Presenter(s): Pat Harcourt (Waquoit Bay National Estuarine Research Reserve: Waquoit, MA)

FORMAT: Workshop

SUBJECT: Earth Science

GRADE LEVEL: Middle Level-High School/Informal Education

CONFERENCE STRAND: Using and Abusing Data

Sunday, March 30 8:00–9:00 AM

What Teachers Think and Know About Teaching About Estuaries: Results and Methods of a Nationwide Needs Assessment

Boston Convention & Exhibition Center, Room 102B

Our curriculum about estuaries accounts for teachers' knowledge, practices, concerns, and obstacles by building from an online survey. Learn what we found and how.

Presenter(s): James K.L. Hammerman (TERC: Cambridge, MA); Atziri O. Ibanez (National Estuarine Research Reserve System: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: General Science

GRADE LEVEL: General

Sunday, March 30 9:30–10:30 AM

Discover How National Estuarine Research Reserve System (NERRS) Research Is Being Used in Exciting Educational Programs Across the Country

Boston Convention & Exhibition Center, Room 105

Come learn about the wealth of research and education happening in coastal areas and how you can bring estuarine science into your classroom.

Presenter(s): Amy N. Clark (National Estuarine Research Reserve System: Silver Spring, MD); Atziri O. Ibanez (National Estuarine Research Reserve System: Silver Spring, MD)

FORMAT: Presentation

SUBJECT: Environmental Science

GRADE LEVEL: General